

WHAT IS CLAIMED IS:

1 1. A method for performing common call processing management using a common software
2 platform including horizontal components for providing common functions required in all
3 communication systems, and vertical components for providing specific functions on the basis of
4 communication systems, comprising the steps of:

5 allowing a common agent to perform corresponding operations including an operation of
6 gathering Internet information on the basis of a predetermined schedule irrespective of a manager's
7 intervention;

8 allowing an operations administration and maintenance module to administer and maintain
9 a network in which the corresponding operations are performed on the Internet; and

10 allowing a common call processor to manage a subscriber in response to a call signal
11 provided from a physical component receiving a subscriber signal and set up a voice path on the
12 basis of the call signal where the subscriber signal can be transmitted through the voice path.

1 2. The method as set forth in claim 1, wherein the common call processor comprises:

2 a call processing management application program interface for providing a switching
3 interface, subscriber interfaces and an interface between call processing modules;

4 an event decoding module for decoding a corresponding command and extracting physical
5 termination information and a relation index;

6 a component specific call processing module for organizing components for performing

7 corresponding functions based on the switching interface and the subscriber interfaces and
8 interfacing with a lower-order module;

9 a common call signal management module for processing and routing a signal generated from
10 the switching interface and a control signal to a corresponding module in response to a request from
11 a subscriber interface;

12 a common connection management module for controlling a connection for setting up a voice
13 path irrespective of hardware and an application program; and

14 a call resource management module for managing system resources associated with call
15 processing.

1 3. The method as set forth in claim 2, wherein the component specific call processing module
2 comprises a vertical component having at least one of a media gateway control protocol interface,
3 a V5.2 interface and a GR303 interface being voice call signal interfaces.

1 4. The method as set forth in claim 3, wherein the physical component comprises at least one
2 of a switch module, a tone generator and a physical port.

1 5. The method as set forth in claim 4, wherein the common call processor performs specific
2 call processing according to kinds of vertical and physical components on the basis of the extracted
3 physical termination information and relation index, allocates a system's switching resources,
4 decides path information and generates a control command for a physical switch.

1 6. The method as set forth in claim 5, wherein the path information decided by the common
2 call processor comprises address information associated with at least one of a card location and a
3 destination by switching.

1 7. An apparatus for performing common call processing management using a common
2 software platform including horizontal components for providing common functions required in all
3 communication systems, and vertical components for providing specific functions on the basis of
4 communication systems, comprising:

5 a common agent for performing corresponding operations including an operation of gathering
6 Internet information on the basis of a predetermined schedule irrespective of a manager's
7 intervention;

8 an operations administration and maintenance module for administering and maintaining a
9 network in which the corresponding operations are performed on the Internet; and

10 a common call processor for managing a subscriber in response to a call signal provided from
11 a physical component receiving a subscriber signal and setting up a voice path on the basis of the call
12 signal such that the subscriber signal can be transmitted through the voice path.

1 8. The apparatus as set forth in claim 7, wherein the common call processor comprises:

2 a call processing management application program interface for providing a switching
3 interface, subscriber interfaces and an interface between call processing modules;

4 an event decoding module for decoding a corresponding command and extracting physical
5 termination information and a relation index;

6 a component specific call processing module for organizing components for performing
7 corresponding functions based on the switching interface and the subscriber interfaces and
8 interfacing with a lower-order module;

9 a common call signal management module for processing and routing a signal generated from
10 the switching interface and a control signal to a corresponding module in response to a request from
11 a subscriber interface;

12 a common connection management module for controlling a connection for setting up a voice
13 path irrespective of hardware and an application program; and

14 a call resource management module for managing system resources associated with call
15 processing.

1 9. The apparatus as set forth in claim 8, wherein the component specific call processing
2 module comprises a vertical component having at least one of an media gateway control protocol
3 interface, a V5.2 interface and a GR303 interface being voice call signal interfaces.

1 10. The apparatus as set forth in claim 9, wherein the physical component comprises at least
2 one of a switch module, a tone generator and a physical port.

1 11. The apparatus as set forth in claim 10, wherein the common call processor performs

2 specific call processing according to kinds of vertical and physical components on the basis of the
3 extracted physical termination information and relation index, allocates a system's switching
4 resources, decides path information and generates a control command for a physical switch.

1 12. The apparatus as set forth in claim 11, wherein the path information decided by the
2 common call processor comprises address information associated with at least one of a card location
3 and a destination by switching.